UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,330	03/07/2002	Mihaly Toth	872.0235,U1(US)	6246

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EXAMINER
AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
2143	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _04 April 2007_.

2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-29_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-29_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☒ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 are presented for examination; claims 1, 18, 21, and 22

independent.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4,

2007 has been entered.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claims 22, 27, and 28 rejected under 35 U.S.C. 101 because they fail to

establish a statutory category of invention. Exemplary claim 22 recites "a computer

program product" which, in the art, is construed as merely software. As such, software,

per se, fails to establish a statutory category of invention as defined in MPEP 2106.

Correction is required.

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

        Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bayeh et al. (USPN 6,098,093) (hereinafter Bayeh) in view of Shachor (USPN

6,947,992).

5.   Referring to claim 1, Bayeh discloses a method of managing a plurality of

sessions (e.g. abstract), the sessions being between a plurality of terminals and a

server (i.e. web server and client) and a server having a plurality of threads (i.e. servlets

containing a plurality of servlet threads) the method comprising:

        routing the sessions to a plurality of web servers (i.e. sending the client requests

to a web server based on a load balancing algorithm provided by the host 59) (col. 8,

lines 50-55);

        assigning a servlet to each web server which provides session services (since

each servlet contains at least one servlet thread, this satisfies the limitation of assigning

a thread to the web server sessions) (col. 8, lines 42-67).

        Bayeh does not specifically state grouping the sessions into a plurality of groups,

rather routing the sessions to the web servers based on a load-balancing algorithm. In

analogous art, Shachtor discloses another method of managing a plurality of sessions

which discloses assigning sessions to a group (i.e. client sessions are assigned to a

particular application process based on an affinity value associated with the client) (e.g.

abstract; col. 6, line 37 to col. 7, line 22). It would have been obvious to one of ordinary

skill in the art to combine the teaching of Bayeh with Shachor since Bayeh discloses

that load-balancing techniques are known in the art (col. 8, lines 56-57). This would

lead one of ordinary skill in the art to search for methods of session distribution between

servers, eventually finding Shachor and its novel method of utilizing session affinity

values to assign client sessions to the same thread, thereby allowing the sessions of

Bayeh to be executed in the same environment as before, resulting in reduced

overhead processing for the servers while effectively allowing cached data within the

server to be reutilized, thereby reducing server processing as supported by Shachor

(col. 2, lines 39-45).

6.   Referring to claims 2 and 3, Bayeh discloses the grouping occurs when a session

is created or becomes active (it is understood that when a session is created, it is

inherently becoming active) (col. 8, lines 42-58).

7.   Referring to claim 4, Bayeh discloses one group is provided for each thread,

such that there are equal numbers of groups and threads (i.e. equal numbers of groups,

which are web servers receiving requests, and threads, which are servlet engines which

will participate in the session management solution) (col. 8, lines 59-67).

8.   Referring to claim 5, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the sessions are assigned statically to particular threads, however does state that load-balancing techniques are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for load balancing techniques in which static assignment techniques (i.e. based on client's IP address or round-robin technique) are well known in the art. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for static load balancing techniques are well known and expected in the art. It would be obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Bayeh to incorporate static load balancing techniques in order to easily route requests between entities, without undue processing and thereby increasing throughput and reducing overall system overhead.

9.   Referring to claim 6, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically state a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption, however when a session resumes, it will be processed by the front-end processor as it was a new session connection, and will be routed as required by the host 59, it will then be routed to a second group which may or may not be the same as the first group. By this rationale it would have been obvious to one of ordinary skill in the art to understand that a session is put into a first group in a first time period

before suspension and put into a second group in a second time period following

resumption to simplify connection processing and reduce overall system overhead.

10.   Referring to claim 7, Bayeh discloses the invention substantively as described in

claim 6 above. Bayeh does not specifically state the second group is chosen on the

basis of activity levels, however does disclose the sessions are assigned based on the

relative levels of particular threads, however does state that load-balancing techniques

are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the

art to search for load balancing techniques in which incorporate load balancing

assignment techniques (i.e. round-robin, percentage of activity monitored, etc.) are well

known in the art. By this rationale, "Official Notice" is taken that both the concept and

advantages of providing for relative load balancing techniques are well known and

expected in the art. It would be obvious to a person of ordinary skill in the art at the time

the invention was made to modify the invention of Bayeh to incorporate load balancing

techniques in order to easily route requests between entities efficiently, and effectively

utilize processing time in order to maximize throughput of the system.

11.   Referring to claim 8, Bayeh discloses the invention substantively as described in

claim 6 above. Bayeh does not specifically state the second group is chosen on the

basis of activity levels, however does disclose the sessions are assigned randomly to

particular threads, however does state that load-balancing techniques are well known in

the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for

load balancing techniques in which incorporate random load balancing assignment

techniques which are well known in the art. By this rationale, "Official Notice" is taken

that both the concept and advantages of providing for random load balancing

techniques are well known and expected in the art. It would be obvious to a person of

ordinary skill in the art at the time the invention was made to modify the invention of

Bayeh to incorporate random load balancing techniques in order to easily route

requests between entities efficiently, reducing processing overhead by not requiring

monitoring software for the processes, thereby increasing throughput and availability of

the system.

12.   Referring to claim 9, Bayeh discloses each group has a queue and each session

puts its events into that queue (col. 12, line 29-58).

13.   Referring to claim 10, Bayeh discloses the sessions are grouped by a thread

referred to as an acceptor thread (i.e. load balancing process (col. 8, lines 42-58).

14.   Referring to claim 11, Bayeh discloses the acceptor thread calls a function which

is answered by a notification that a new session has been created and then assigns the

new session to a particular session group (col. 8, lines 43-57).

15.   Referring to claim 12, Bayeh discloses the invention substantively as described

in claim 1. Bayeh does not specifically disclose the sessions remain open for an

undetermined period of time until closed, however it is well known that clients can close

sessions on their own using HTTP (i.e. HTTP CLOSE function). By this rationale,

"Official Notice" that both the concepts and advantages of providing for sessions which

remain open until closed is well known in the art. It would have been obvious to one of

ordinary skill in the art to modify the teaching of Bayeh to include sessions which remain

open until closed in order to conform to the HTTP protocol and allow computers which

conform to this protocol to effectively manage their own sessions.

16.   Referring to claims 13 and 14, Bayeh discloses the invention substantively as

described in claim 1. Bayeh does not specifically disclose the terminals are mobile

terminals and cellular telephones, however it is well known that wireless mobile

terminals and cellular telephones can act as client devices and request information from

servers. By this rationale, "Official Notice" that both the concepts and advantages of

providing for cellular telephones and mobile terminals as the terminals is well known

and expected in the art. It would have been obvious to one of ordinary skill in the art to

modify the system of Bayeh to include cellular phones as the terminals to allow the

system to be accessed by a plurality of different entities, thereby providing a bigger

market for the system and allowing more clients to access the system, and further

increase customer satisfaction.

17.   Referring to claim 15, Bayeh discloses load balancing means is included in the

assignment mechanism of the session (col. 8, lines 42-58).

18.   Referring to claim 16, Bayeh discloses the sessions involve obtaining information or conducting transactions through the Internet (col. 8, lines 20-41).

19.   Referring to claim 17, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the sessions are part of the Wireless Session Protocol (WSP), however the WSP is well known to easily provide session service from mobile devices to web servers and allow mobile terminals to access the Internet. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for using the WSP protocol for sessions is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to provide using the WSP for the devices in order to allow mobile devices to access the service, thereby allowing more clients to access the system, and further increase customer satisfaction.

20.   Claims 18-29 are rejected for similar reasons as stated above.

Response to Arguments

21.   Applicant's arguments filed April 4, 2007 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

22.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

23.   Applicant has failed to seasonably challenge the Examiner's assertions of well known subject matter in the previous Office action(s) pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the first Office action are now established as admitted prior art of record for the course of the prosecution. See In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Joseph E. Avellino, Examiner
April 9, 2007